

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7553

Petition of Entergy Nuclear Vermont Yankee,)
LLC, pursuant to 30 V.S.A. § 248(j) for a)
Certificate of Public Good to Construct an)
Enhanced Security Barrier System along the)
perimeter of the Owner Controlled Area at the)
Vermont Yankee Nuclear Power Station)

Order entered: 10/29/2009

I. INTRODUCTION

This case involves a petition filed with the Vermont Public Service Board ("Board") by Entergy Nuclear Vermont Yankee, LLC ("ENVY"), on July 31, 2009. ENVY requests approval, pursuant to 30 V.S.A. § 248(j), to construct an Enhanced Security Barrier System ("ESBS") along the perimeter of the Owner Controlled Area ("OCA") at the Vermont Yankee Nuclear Power Station ("VY Station" or "Station") in Vernon, Vermont (the "Project"). The proposed ESBS includes the installation of two new chain-link fences that are approximately 6,000 feet in length each, with one fence approximately fifteen (15) feet high and the other fence approximately ten (10) feet high, and including three personnel access gates/stations located at the eastern, northern and southern ends of the OCA. The outer fence will follow the previously installed concrete security barriers¹ and run along the western edge of the Connecticut River. The inner fence will be located between the outer fence and the Owner Protection Area ("OPA"). The three new access stations will serve as checkpoints for validation of personal identification prior to entering the OCA. Additional monitoring equipment and security lighting will be installed as part of the project. Construction of ESBS for all U.S. nuclear power plants was mandated by the Nuclear Regulatory Commission ("NRC") under 10 C.F.R. Section 73.55.

1. Approved by the Board in Docket No. 6953 on 7/09/04.

Under this regulation, all work necessary to meet NRC security requirements must be completed by March 31, 2010. To meet this deadline, Entergy VY proposes to begin construction of the Project in the fall of 2009. The petition included prefiled testimony and exhibits as well as proposed findings and a proposed order, pursuant to the requirements of 30 V.S.A. § 248(j).

Notice of the filing in this Docket was sent on August 21, 2009, to all entities specified in 30 V.S.A. § 248(a)(4)(c), and all other interested parties. The notice stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before September 21, 2009.

On September 8, 2009, a member of the public filed comments with the Board, but asked that the comments not be made public. Therefore, the Board is unable to consider those comments for the purposes of this proceeding.

On September 21, 2009, the Vermont Agency of Natural Resources ("ANR") filed a letter with the Board stating that it had not identified any significant issues related to the substantive criteria of 30 V.S.A. § 248. The Vermont Department of Public Service ("DPS") submitted comments on September 21, 2009, which stated that the DPS did not believe that the petition raises any substantive issues with respect to the criteria of 30 V.S.A. § 248. No other parties filed comments as requested by the Notice.

The Board has determined that the proposed project will be of limited size and scope and that the petition has effectively addressed the issues raised with respect to the substantive criteria of 30 V.S.A. § 248. Consequently, we find that the procedures authorized by Section 248(j) are sufficient to satisfy the public interest and no hearings are required.

II. FINDINGS

1. ENVY owns and operates the Vermont Yankee Nuclear Power Station in Vernon, Vermont, which is an electric-generation facility. McElwee pf. at 1
2. The VY Station is located on approximately 127 acres of land with direct access off of Governor Hunt Road in Vernon, Vermont. *Id* at 2.

3. The Station is currently surrounded by a fence which encloses the OCA. The OCA is part of the security-patrolled area and access to this area is limited. *Id.* at 2.

4. ENVY proposes to construct an enhanced security barrier system at the VY Station to comply with NRC regulations. *Id.* at 1-2, 5.

5. The Project is part of heightened security measures ENVY is implementing to enhance the Station's security against sabotage or terrorist attack, and its purpose is to secure the Station and prevent access into portions of the OCA by unauthorized individuals. McElwee pf. at 5.

6. Certain information relating to security measures at the Station constitutes "Safeguards Information," protected in accordance with 10 C.F.R. Part 73.21, which ENVY cannot lawfully disclose. *Id.* at 2.

7. The Project includes the installation of two new chain-link fences that are approximately 6,000 feet in length each and three personnel-access gates. The fences and the three proposed personnel-access gates will be located within the OCA. One of the proposed fences is approximately fifteen (15) feet high, and the other is approximately ten (10) feet high. One of the new fences will follow the previously installed concrete security barriers that were approved by the Board's Order dated July 9, 2004, in Docket No. 6953, and will continue along the edge of the Connecticut River. The other fence will be located between the previously-described fence and the existing OPA. McElwee pf. at 3; exh. EN-2.

8. The outer fence will be placed directly on the outside of the existing concrete security blocks and the inner fence will be located primarily on existing black top and seeded areas. *Id.*

9. The three new access and egress stations will be constructed to provide points where personnel identification will be validated prior to entry. One station will be located directly east of the Plant Support Building while the other two will be located at the existing Sally Ports - one at the north end and one at the south end of the existing barriers. The three personnel-access stations will consist of pre-fabricated enclosures approximately thirty (30) feet wide and twelve (12) feet long. Power to the enclosures will be provided from existing ENVY buildings and structures. *Id.*

10. In addition to the two new fences and point-of-entry stations, additional personnel monitoring equipment will be installed along the fence lines. *Id.*

11. The existing concrete blocks which currently have a space of approximately 18 to 24 inches between them will either be relocated, have additional concrete placed between them, or modified by installation of another suitable barrier such that no space exists between the blocks. McElwee pf. at 4.

12. Installation of the enclosures will require trenching from the enclosures to existing buildings and structures for installation of power and control circuits. *Id.*

13. ENVY proposes to install limited security lighting within the OCA to enhance the ability of the security force to assess and respond to security events. New point-of-entry enclosure lighting will be installed inside each enclosure as well as outside the enclosure to facilitate access and egress into the buildings. *Id.* at 4-5.

14. To provide the necessary visibility for the security force in this new restricted area, ENVY will need to remove a number of existing trees along the western edge of the Connecticut River. ENVY will preserve as many of the existing trees as possible. *Id.* at 4.

15. ENVY must complete installation of the ESBS to meet NRC security requirements no later than March 31, 2010. To meet this deadline, ENVY proposes to begin construction of the fences and point-of-entry stations during the fall of 2009 to allow sufficient time to provide training to the security force for use of the new equipment as well as new defense strategies prior to the required date of March 31, 2010. Some minor work may extend into early 2010. McElwee pf. at 5.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

16. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality; this finding is supported by findings 17 through 25, below.

17. By letter dated July 15, 2009, ENVY provided the Town of Vernon Planning Commission with plans for the construction of the Project as required by subsection 248(f). McElwee pf. at 6.

18. By letter dated July 16, 2009, the Vernon Planning Commission stated that it had agreed to waive the 45-day notice pursuant to § 248(f) and had determined that the Project would not unduly interfere with the orderly development of the region or overburden municipal and governmental services in the Town of Vernon. McElwee pf. at 6-7; exh. EN-3.

19. At its meeting held on July 20, 2009, the Vernon Selectboard voted that the Project would not unduly interfere with the orderly development of the region and would not overburden municipal and governmental services in the Town of Vernon. McElwee pf. at 7; exh. EN-4.

20. The Vernon Town Plan, which was adopted on November 3, 2003, specifically cites the Station, its contribution to the community's tax base and its provision of varied employment opportunities as being largely responsible for Vernon's rural independence and self-sufficiency. McElwee pf. at 7; exh. EN-5.

21. The Vernon Town Plan states the Town's policy to encourage land uses that help to protect river corridors, scenic highways and roads, scenic views and other scenic resources. McElwee pf. at 8; exh. EN-5.

22. The Project will not adversely affect river corridors, scenic highways and roads, scenic views or other scenic resources; the Project will be sited adjacent to ENVY's electric-generation facility, which is industrial in character, consists of concrete and metal sidings and includes transmission lines, towers and transformers; the Project will not adversely affect the view of the Connecticut River corridor; and the Project is not located on a scenic highway or road. McElwee pf. at 8.

23. On July 15, 2009, ENVY provided the Windham Regional Commission ("WRC") with plans for the Project as required by Section 248(f). McElwee pf. at 9.

24. By letter dated July 29, 2009, Mr. James P. Matteau, Executive Director of the WRC, responded that the Project would not have an adverse aesthetic effect and would not unduly interfere with the orderly development of the region; the WRC further waived the 45-day, pre-application review allowed under subsection 248(f). McElwee pf. at 9; exh. EN-6.

25. The Project is consistent with the Windham Regional Plan's land use policies: it is located within an existing development area; it is a consistent use in terms of function and scale; it will not impact any natural resources of the surrounding area; and it does not involve the

extension or expansion of roads, energy transmission or distribution facilities. McElwee pf. at 13.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

26. The Project is needed to meet present and future demand for service within Vermont. The VY Station provides approximately one-third of the power in Vermont. The Project is required to allow the VY Station to continue to operate. McElwee pf. at 1-2, 5, 13, 18.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

27. The Station, and the transmission lines that serve it, will not change if the Project is constructed; therefore, this criterion is not applicable. McElwee pf. at 14.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

28. The VY Station provides a low-cost source of power to Vermont through March 21, 2012, with associated benefits in terms of jobs, income and property taxes paid. Increased security at the Station helps to ensure these benefits will continue. McElwee pf. at 14.

**Aesthetics, Historic Sites, Air and Water Purity,
the Natural Environment and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

29. The Project as proposed will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety; this finding is supported by findings 30 through 64, below, which are based on the criteria specified in 10 V.S.A. § § 1424a(d) and 6086(a)(1) through (8), 8(A) and (9)(K).

Outstanding Resource Waters

[10 V.S.A. § 1424(a)(d)]

30. The Project will not be located on or anywhere near any segment of any outstanding resource waters, as defined by the Vermont Water Resources Panel. McElwee pf. at 15.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

31. The Project will not cause air pollution levels that create a threat to public health or a nuisance for nearby neighbors. There will be no sources of emissions from the Project other than minimal dust during the installation of the ESBS. There are no other sources of air emissions from the Project. The Project will not cause water pollution and will comply with applicable regulations adopted by the Vermont Departments of Environmental Conservation and Health. McElwee pf. at 16.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

32. The Project is not situated in a headwaters area or a significant aquifer-recharge area. Specifically, the Project area is not the headwaters of applicable waters as characterized by steep slopes and shallow soils and has a drainage area greater than 20 square miles. *Id.*

33. The Project area is not over 1,500 feet in elevation. The elevation is approximately 252 feet and is not the watershed of a public-water supply designated by the Vermont Department of Health. *Id.*

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

34. The Project does not involve the disposal of waste. The Project will not generate industrial/manufacturing wastewater, chemicals, pesticides, batteries, radiation, hazardous wastes or any other harmful or toxic substances, and will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells. McElwee pf. at 17.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

35. The Project will not have water supply or wastewater connections, and therefore no additional water will be used as a result of the Project. *Id.*

Floodways

[10 V.S.A. § 6086(a)(1)(D)]

36. The VY Station and related improvements are built at an elevation generally around 252 feet above sea level, a level in excess of the FEMA 100- and 500-year flood elevations, which are approximately 226.3 and 230.9 feet above sea level at the VY Station's intake structure (based on FEMA Flood Insurance Study Profile and Mapping, effective September 28, 2007). *Id.*; exh. EN-8.

37. While some of the additional fencing proposed will run adjacent to the Connecticut River, there will be no impact on the floodplain. *Id.*

Streams & Shorelines

[10 V.S.A. § 6086(a)(1)(E) and (F)]

38. There are no streams in the Project area; the closest river shoreline is the Connecticut River. The Project will have no impact on the natural condition of the Connecticut River, its shoreline, vegetation or stability. McElwee pf. at 18.

39. The ESBS will be located entirely within the OCA, and thus within the fence boundary on the east side of the VY Station adjacent to the Connecticut River. The additional fencing proposed will not impact the existing shoreline. *Id.*

40. The Project is necessary to ensure compliance with NRC security requirements and to provide additional security to the Station and prevent access to the OCA by unauthorized individuals. *Id.*

41. The Station is a secure site, so no access to the water for recreation is presently provided from the property. *Id.*

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

42. Based on a review of the National Wetlands Inventory Mapping, there are no significant wetlands in the area of the Project. Therefore, the Project will not create an undue adverse impact upon significant wetlands. *Id.*; exh. EN-9.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

43. The Project will not have water-supply or wastewater connections. McElwee pf. at 19.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

44. The Project as designed will not result in unreasonable soil erosion or reduce the ability of the land to hold water. The VY Station is located on a relatively flat site located above the Connecticut River and over the years has been engineered to establish stormwater drainage systems and other erosion-stabilizing features subject to applicable ANR stormwater-operating permits. McElwee pf. at 20.

45. As part of the Project, ENVY proposes to either relocate the existing concrete security blocks or place additional concrete or another suitable barrier between them, such that no space exists between the blocks. The existing blocks are currently spaced approximately 18 to 24 inches apart. Installation of the additional spacers will be such that it does not affect the drainage and surface-water runoff already considered as part of the original security barrier installation. Therefore, there will be no change in groundwater treatment required as a result of the Project. *Id.*

46. The VY Station has also obtained coverage under a Multi-Sector Permit for Stormwater Discharges Associated with Industrial Activity (or "SGP") through Permit #3653-9003, which covers the entire Station. These systems and features ensure that the VY Station's operation, and therefore the proposed Project, will not cause unreasonable soil erosion or reduction in the capacity of the land underneath the VY Station to hold water. *Id.*

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

47. The Project will not cause unreasonable congestion or unsafe conditions with respect to the only applicable transportation facilities: local highways. Aside from a limited temporary increase in construction vehicles and delivery trucks bringing the new fence materials on site during construction, the Project's limited traffic, similar to but far less than traffic during a

scheduled outage, will not cause unusual congestion or unsafe transportation conditions. McElwee pf. at 21.

Educational and Municipal Services

[10 V.S.A. § 6086(a)(6)&(7)]

48. The Project will have no impact on educational services: It will not change employment at Vermont Yankee and therefore the number of children to be educated in the area. *Id.*

Aesthetics, Necessary Wildlife Habitat, Historic Sites and Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

49. The installation of the ESBS will result in minimal aesthetic impacts and will be consistent with the character of the VY Station and the surrounding area. McElwee pf. at 22.

50. The ESBS will be comprised of two new chain-link fences, approximately 6,000 feet long and ten (10) and fifteen (15) feet high, respectively, as well as three personnel access and egress gates with enclosures measuring approximately thirty (30) feet wide and twelve (12) feet long as associated security lighting. McElwee pf. at 2-5.

51. To provide the necessary visibility for the security force in this new restricted area, ENVY will need to remove a number of existing trees along the western edge of the Connecticut River. The Project will preserve as many of the existing trees as possible. The tree clearing will not impact views of the Station from the western side of the Station along Governor Hunt Road and Route 142 and will not materially impact views from the east. McElwee pf. at 4, 22-23.

52. The Project will result in very minimal change to the surrounding landscape. Due to the ESBS's low profile, consisting of chain-link fencing and three security gates, the changes associated with the Project will not be visually obtrusive in the context of the existing VY Station facilities. *Id.*

53. The proposed Project will be visually considered part of the existing power-plant facility and will not significantly change the character of the area. Existing vegetation will act as screening from other buildings in the area, especially during the summer months. *Id.*

54. Because the Station's construction in the early 1970s substantially disturbed the site, and since that time the area has been utilized for agricultural purposes, no archeological review of the Project site was required. *Id.*

55. According to the Vermont Fish and Wildlife Nongame and Natural Heritage Program, there are no significant natural habitats identified on the Project site. *Id.*

56. The Project will not affect any necessary wildlife habitat or endangered species sites. *Id.*

Discussion

Based on the above findings, the proposed project will not have an undue adverse effect on the aesthetics or scenic and natural beauty of the area. In reaching this conclusion, we rely on the Environmental Board's methodology for determination of "undue" adverse effects on aesthetics and scenic and natural beauty as outlined in the so-called Quechee Lakes decision. Quechee Lakes Corporation, 3W0411-EB and 3W0439-EB, dated January 13, 1986.

As required by this decision, it is first appropriate to determine if the impact of the project will be adverse. The project would have an adverse impact on the aesthetics of the area if its design is out of context or not in harmony with the area in which it is located. If it is found that the impact would be adverse, it is then necessary to determine that such an impact would be "undue." Such a finding would be required if the project violates a clear written community standard intended to preserve the aesthetics or scenic beauty of the area, if it would offend the sensibilities of the average person, or if generally available mitigating steps would not be taken to improve the harmony of the project with its surroundings. The Board's assessment of whether a particular project will have an "undue" adverse effect based on these standards should be significantly informed by the overall societal benefits of the project.²

The Project is located on an existing industrial site and will appear visually as part of the power-plant facility and will not significantly change the character of the area. In addition, the low profile of the ESBS, and related structures, minimizes the visual impact of the Project on the surrounding landscape. When viewed in this context, the Project will fit the context of its surroundings and will not have an adverse aesthetic impact.

2. Docket 6884, Order of 4/21/04 at 20-21.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

57. The Project's construction and operation will not adversely affect the State's or Vernon's investments in highways. *Id.*

58. The Project will have no impact on operation of the New England Central Railroad, and several trains, including Amtrak's Vermonter, pass near (about 1,100 feet at the closest point) but outside of the VY Station's site daily. McElwee pf. at 24-25.

59. The Project will have minimal affect on the Connecticut River as the majority of the Project will be located away from the river and will have limited scenic and no water-quality impact on the river. *Id.*

60. The Project is located well to the north of the Vernon dam and will have no effect on the hydroelectric station located at the dam. *Id.*

61. The construction and use of the Project will have no permanent traffic impact on state or local highways and a very limited impact during construction. *Id.*

Public Health and Safety

[30 V.S.A. § 248(b)(5)]

62. The Project's purpose is to further secure the Station and prevent unauthorized personnel access into portions of the OCA. The Project is required to meet NRC regulations and is one of a number of heightened security measures that ENVY has implemented and will implement to enhance the Station's security against sabotage or terrorist attack. Therefore, the Project will serve to enhance public health and safety. *Id.*

63. The Chiefs of the Vernon Police and Fire Departments have reviewed the Project plans and determined that the Project will not have an adverse effect on the public health and safety. McElwee pf. at 26; exhs. EN-10 and EN-11.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

64. As a wholesale utility that does not distribute electricity to the public, ENVY is not obligated to prepare and submit for approval an integrated-resource plan (or "IRP"). McElwee pf. at 26.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

65. Vermont's Electric Energy Plan, dated January 19, 2005 (the "Plan"), does not specifically mention the Project; however, the Plan recognizes that the VY Station is the State's single largest supply source. *Id.* The proposed Project complements the goals of the Plan and the Plan Update, as it contributes to the safe operation of the Station by providing a clear demarcation of the Station's security boundaries. McElwee pf. at 24. *Id.*

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

66. The Project does not require access to or use of transmission facilities. McElwee pf. at 27.

III. CONCLUSION

Based upon all of the above evidence, we conclude that the proposed Project will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

IV. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The proposed modifications, in accordance with the evidence, plans, and other information presented in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. Section 248, and a certificate of public good shall be issued in the matter.

Dated at Montpelier, Vermont, this 29th day of October, 2009.

<u>s/James Volz</u>)	
)	PUBLIC SERVICE
)	
<u>s/David C. Coen</u>)	BOARD
)	
)	OF VERMONT
<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: October 29, 2009

ATTEST: s/Judith C. Whitney
Deputy Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.